

ABSTRACT

Provided is a method of producing an oxide superconducting film on a single-crystal substrate by depositing, on the single-crystal substrate, substances scattered from a raw material due to irradiation with laser beams according to a pulsed-laser deposition method, wherein the irradiation of the raw material is performed in a manner such that the repetition frequency of the pulse irradiation of the laser beams is divided into at least two steps. Thus, an oxide superconducting film having a high critical current density can be produced by the method.